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ABSTRACT

Vocational-technical education has neglected the area of policy research, not because Federal support preempts the policy-making role, but for a combination of reasons: (1) adverse reaction to a vocational-technical program is not welcomed by its authors and benefactors, (2) vocational-technical educators are not typically researchers, (3) the need for study of a problem is precluded by the need for action, (4) researchers within and outside the field are not trusted to understand the problems, and (5) educators in vocational-technical education are reluctant to sacrifice any of the independence presently enjoyed by State and local leadership. Policy research is necessary, however. The image of vocational-technical education is suffering because the evidence supporting its worth has not been collected, organized, and analyzed. Studies which have been conducted (Kaufman and Schaefer, Walter M. Arnold, Arthur M. Lee) do not attempt to measure in an analytic sense what policy produces the best results. This is the time to involve social and behavioral scientists in vocational-technical education evaluation, to convince political authorities that the data do support the conjectures, and to be an accountable member of the educational system in terms of funding and policy. (AG)

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POLICY RESEARCH AND NATIONAL AND STATE EVALUATION STUDIES OF VOCATIONAL-TECHNICAL EDUCATION

MAR 24 1975

by

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The topic of policy research has surfaced, at least in the discipline of sociology, with vigor and forceful debate indicative of those stout and hearty souls that make up this discipline. James Coleman (1972) began stirring the pot for policy research in the social sciences as early as 1972, when he published his paper advocating that the social scientists function as policy scientists. Although the Coleman paper brought quick reaction, some to the contrary from his fellow sociologists, the fact remains that vocational-technical education has not indulged itself in policy research either with or without the assistance of this discipline. The question, therefore, is not necessary why but why not? Lest such rhetoric appears confused, precisely stated, "Should we embark on some straightforward policy research and if so, what might be the pay off to the improvement of our field?"

As near as I can determine, after having been exposed to vocational education in a number of states, there is indeed an objective of those in charge to prove that the acceptance of federal vocational funds does not impinge upon the prerogative of a state to set policy. And to prove this, we

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literally boast that vocational education policy is as different in as many cases as we have states. Such divergency comes quickly to the fore when one attends our national meetings and hears time after time state leadership rising to depict in glowing terms how problems were solved in their state in their unique manner and with but the weakest of appeal to others reflecting, "try it -- you'll like it". And, to show the complete independence on the part of fellow cohorts, each returns home determined not to try it. It is no wonder, then, that one somehow gets the feeling that all that interests us in generation after generation of vocational educators is the rediscovery of the wheel. I submit our historical forefathers, the Prossers, Wrights and Allens, literally knew what we know today and in some cases were practicing it much better.

In defense of those who do not "try it" is the fact that too often our position papers do not carry the hard facts to support our conjectures. At one time I thought the establishment of the State Research Coordinating Units would provide such hard data, but I am now convinced that in the main, they do not have the analytic capability for such an undertaking. Instead, we find in the Semiannual Report on Research Coordinating Unit Activities (1972) such bland undertakings as publishing newsletters, providing microfiche readers, conducting career development programs, special paper preparation and dissemination and the like. Rarely does one find reported studies of a follow-up nature, evaluative undertaking, and more basic type

research endeavors. And even rarer does one get to feel that we have enlisted in our efforts the research expertise of those related disciplines such as sociology, economics and psychology. I need not remind you that the Research Coordinating Units account for several millions of dollars of the yearly federal vocational funds.

The much talked about report entitled Work in America (1972) and the more recent article appearing in the July, 1974 issue of Manpower (1974) entitled "Vocational Education: Performance and Potential" blatantly attacks vocational education as being ineffective, ill conceived, and in general, a poor investment. This latter article (Vocational Education: Performance and Potential) purports to have reviewed the findings of our research undertakings and answers such questions as:

> Are graduates of high school vocational programs who go straight to jobs better off in the quality of jobs, earnings, unemployment rates, or job satisfaction, than comparable non-vocational graduates who go to work immediately? Is the nature of the curriculum a causal or decisive factor in any difference between these groups? Other important issues include the comparative drop out rates of students in various high school curricula and the effect of vocational education on the pursuit of higher education.

The conclusion reached was that vocational education is not a very viable alternative in terms of the issues raised. Yet the review of our research is shaded by such caveats as:

> At the outset, some words of caution are in order about the studies reviewed in this article. They are beset with conceptional problems, methodological pitfalls, and statistical limitations. They often are not comparable with one another, and few of them were done recently enough to measure the improvements in high school vocational education planned by the 1968 amendments for the Vocational Education Act. Proceeding from different values and assumptions, the analysts have not even agreed on the objectives or outcomes to be tested.

Having been engaged, along with Jacob Kaufman, in several studies of an evaluative nature of vocational-technical education I can sympathize with some frustrations alluded to by those who undertake to review our field's limited and meager attempts to prove once and for all the worth of vocational education. I can also attest to the lack of full review of the Schaefer and Kaufman findings in the two previously mentioned publications. Our data, in at least two studies (Kaufman, Schaefer, et al, 1967, and Schaefer and Kaufman, 1971), show that vocational education has a "pay off" and has a potential which is only now being realized by the total educational profession -- and that is using the "process of vocational education" for all youth as so ably defined by former Commissioner Sidney P. Marland, Jr., in his career education concept.

It is easy to be "fouled out" when one is quoted out of context or misquoted altogether. Our "role" study represents the largest single sample of high school graduates ever interviewed, some 5,181, from vocational, general, and academic curriculums correlated with some 2,826 on the job

supervisors and over 600 employers rating instruments. Questionnaires were received from 1,600 teachers and to check the data obtained from the interviews, another 3,342 respondents completed and returned mailed questionnaires. Moreover, much of the analysis was controlled across the sample by IQ scores, thus making it a quasi experimental type undertaking. Our state-wide study (Massachusetts) was not as extensive but was based on a questionnaire sample of 1,796 stratified on vocational, general, and academic curriculums. In addition, it included a study of 228 private vocational-technical schools and 820 industrial employers.

Consequently, and especially in the "role" study, we were not extrapolating our data from small numbers and the findings, although needing updating, do supply some of the hard data needed even today. But like most evaluative studies, Kaufman's and my work does not attack the problem of policy decisionmaking. I suppose we naively thought that once having accumulated hard data, some policy application would be evident. And I am afraid much the same will happen from Arthur Lee's (1972) national effort. It has just been announced that the National Academy of Science (Educational Researcher, 1974) is in the process of evaluating the overall research and development effort of vocational education. It will be interesting to see what their review will have to say about our policy research effort.

Other studies of an evaluative type which have a bearing on the problem being discussed are Arnold's (1969) study of

Pennsylvania and some of the work of Somers (1971), Strong (1970), Stromsdorfer (1969), and Teh-wei Huietal (1969), as well as the National Planning Association (1972) study Policy Issues and Analytical Problems in Evaluating Vocational Education.

Yet I would hasten to point out that none of these are of the policy research type of which Coleman speaks. They do not attempt to measure in an analytic sense what policy produces the best results. In fact, Kaufman and I studied very little of the policies found, except to get a "gut feeling" that the decision makers for vocational education, whether at the local or state levels, were too low in the hierarchy to have much influence at the top. And the only success we may have had in this argument is the fact that in Massachusetts the State Director's title went from Chief of a Bureau to Associate Commissioner.

This being the case, Coleman's position that policy research is a most neglected area needing study is highly valid. For example, the field of vocational-technical education had been attacked time and time again for its resources distribution; especially the federal dollars each state receives. Yet, we know that these federal dollars produce varied results from state to state. Some states support almost all of their salaried personnel in their division of vocational education out of federal dollars, while others use the same dollars for almost entirely local program support. The point here is that resource distribution policy may, in

one case, produce more in terms of desirable outcomes than in another. But we really do not know. Policy research, to use Coleman's term, can be carried on in terms of path designs to trace the effect the federal funds has on the intended recipient. A long organizational path may negate impact of the policy on its ultimate recipients. In other words, too many federal dollars invested in state division personnel may retard rather than advance programs. Coleman is enough of a realist to see the many problems involved in pure policy research which attempts to measure policy inputs and relate them to policy outputs. One way of doing this (besides experimental design) he suggests is through what he calls "social audit". More specifically, Coleman states:

> In a social audit, resource inputs initiated by policy are traced from the point at which they are disbursed to the point at which they are experienced by the ultimate intended recipient of those resources. It is then those resources as experienced that are related to the outcomes in the research, rather than the resources as disbursed. For there are two possible causes for the ineffectiveness of resources: the resources as experienced may be ineffective in bringing about any change; or the resources as disbursed never reach the ultimate intended recipient and are instead lost somewhere in the path between point and initial disbursement and the point of experience by the ultimate recipient. In research that does not trace the resources along this path, it is impossible to distinguish these two causes of ineffectiveness and the assumption is ordinarily made that resources as experienced are the same as resources as disbursed (p. 18).

While John Evans (1974) in a recent article in the Educational Researcher indicates some progress in evaluative research endeavors and their implication for policy making, it remains, at least from my vantage point, to see anything on the horizon dealing specifically with vocational-technical education policy research. In fact, unless our leadership rises above their present statute and overcomes our image of "business as usual", I see very little chance of maintaining vocational-technical education as a discrete force in the educational mosaic.

Let's face it:

1. Once vocational-technical programs are put into effect, the political force of their authorship and the pressure from their constituency for continued funding makes it almost impossible to acknowledge publicly that they are not as effective as we would like.

2. Vocational-technical educators are doers and not experimenters. We believe actions speak louder than words and we simply do not have the patience to involve ourselves to any great extent in research and inquiry, whether it be for policy making or even saving dollars, for that matter.

3. Our leadership (state and local) is politically astute to the point of making for bad education. Their mode of policy decision making is based on the principle -- if there is enough interest in some problem to support a major study, then the interest will be so great that no one will be willing to wait for the conclusion of the research before

proceeding with the program. On the other hand, if there is not a broad concern over the problem, then there will not be enough interest to fund the research anyway. Either way there need not be any experimentation on the problem.

4. We do not trust our own researchers, let alone those from other disciplines. We fear social and behavioral scientists because they do not understand the problems of our ongoing vocational programs and we are not willing to embrace them long enough so they will get indepth insights into our problems.

5. We have steadfastly refused to use the much talked about but little understood research tools of Program Planning and Budgeting (PPBS) and Management by Objectives (MBO) because they take away the "authoritarian" model of state and local leadership.

It is precisely because of these reasons why we do not do policy research. Yet there is no time more important than now for: 1) involvement of the social and behavioral scientists in the evaluation of vocational-technical education; 2) the need for convincing the political powers that be, that we have the data to support our conjectures and; 3) that we are accountable for our part in the educational mosaic, both in terms of funding and policy. The pay off of policy research could well produce the leverage that vocational-technical education so badly needs.

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